

IN THE SPECIFICATION:

Kindly amend paragraphs 0024 and 0028 as set forth below.

[0024] Now referring to Fig. 1A, there is shown a side view of one embodiment of an optical lens system of the present invention that includes a refractive illumination lens. It is understood that the refractive illumination system (e.g., with a flat, cylindrical, spherical, aspherical, or toroidal entrance or exit surface, or window) is also referred to as a lens 135. Fig. 1A shows a light source 100, the lens 135 having an entrance surface 110 and an exit surface 115, a printed circuit board 105, a target area (or a concentration spot) 120 on a surface and an imaging lens 125. In one embodiment, the light source 100 may protrude through an opening in the printed circuit board ("PCB") 105. Further, as is shown, the light source 100 is at a first angle, α , relative to the printed circuit board 105. Light emitted from the light source 100 enters the lens 135 through the entrance surface 110. The light exiting the exit surface 115 of the lens 135 forms a light beam 130 and is directed to a surface at the target area 120. The target area 120 is in line with imaging lens 125. The surface can be any surface, for example, a tabletop or surface, a mouse pad, a paper, or any other surface. For each discussion the application will refer to a table surface as a generic representation of all surfaces, including a ball surface for a trackball.

[0028] The entrance surface 110 of the lens 135 may be, for example, a spherical surface a cylindrical surface, a toroidal surface, or an aspherical surface and may be refractive, Fresnel, or DOE. Similarly, the exit surface 115 of the lens 135 also may be, for example, spherical, cylindrical, toroidal, or aspherical and may be refractive, Fresnel or

DOE. The entrance surface 110 and the exit surface 115 each refract light. By adjusting the shape of both or either the entrance surface 110 or the exit surface 115, the light beam emerging from the lens 135 can be shaped or tilted as needed. It is noted, and as shown in FIG. 1A, the entrance surface 110 is angled at a second angle, b, relative to the printed circuit board 105 and the exit surface 115 is angled at a third angle, c, relative to the printed circuit board. 105. As an example, if one surface is cylindrical, it will affect one dimension of the light beam from the light source 100. If the one surface is spherical, it will affect both dimensions of the light beam from the light source 100 the same way. If one surface is toroidal, it will affect two dimensions of the light beam from the light source 100, but in a different way. The entrance and exit surfaces 110 and 115 can be parallel (in the sense of two plano-convex lenses linked together by their flat surfaces) or angled (a prism or wedge being added between the two flat surfaces). In the aligned configuration, the entrance and the exit beams axis will be the same. In the angled configuration, the beam axis will be folded.